

**Statement of  
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**Before the European Parliament Committee on Emissions  
Measurement in the Automotive Sector (EMIS)**

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Madame Chair and members of the EMIS Committee, good afternoon.

I am Christopher Grundler, and I direct the United States Environmental Protection Agency's Office of Transportation and Air Quality, which is responsible for developing and implementing national policy and regulations involving emission standard-setting for vehicles, engines, and fuels. These responsibilities include: identifying, developing and administering programs to reduce emissions from passenger cars, trucks, motorcycles, construction and farming equipment, locomotives, aircraft, marine, and lawn and garden equipment. On behalf of the United States, I am honored to participate in this hearing and to have the opportunity to share information and experiences with the Committee regarding our light-duty vehicle compliance program.

The U.S. EPA has a long history of successfully developing and implementing standards for vehicles and engines. These programs have had a demonstrable and positive impact on air pollution in the US. There are several key principles that we believe are fundamental to this success. First, we set standards that are performance-based. In other words our regulations do not

mandate specific technologies ---rather they specify the emissions performance that is required, for example, by setting an emission target, companies and manufacturers must rely on innovation and technology to achieve those standards. We have learned that performance-based standards, combined with other flexible regulatory design features such as the ability for firms to average, bank, and trade emissions credits, have worked to unleash innovation and lower costs. Second, since the late 1990s our approach has been to set standards for BOTH vehicles and fuels to achieve the deepest reductions and at the lowest cost to society. Third, our process is open and transparent to the American public as we conduct technology assessments, modeling and rigorous cost analysis. Finally, we believe that standards without rigorous test procedures AND an active compliance and enforcement program are meaningless.

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Our job at the U.S. EPA is to not only set ambitious emissions standards but to recognize that it is just as important to ensure that the American people benefit from the emissions reductions promised to them. We take our responsibility to oversee the implementation and enforcement of our clean air regulations seriously. It is this oversight that ensures the benefits of clean air emissions standards are achieved; that industry is competing on a level playing field; and that consumers are getting what they pay for. It matters to the industry as well---if we don't do this aspect of our jobs well, the investments they are making in cleaner technology is at risk.

Our regulatory programs for cars and trucks are working. We know this because air quality monitors tell a clear and compelling story: U.S. air quality has dramatically improved as a result of implementing our program, even as vehicle miles and the economy have grown significantly. In addition, we release our compliance and oversight report, which includes facts such as the number of vehicles or engines that manufacturers have recalled as well as the number of voided certificates of conformity, in any particular year due to the U.S. EPA's surveillance and reporting requirements.

The backbone of our standards development AND rigorous compliance work rest with our technical and engineering staff and the investments we've made at the National Vehicle and Fuel Emissions Laboratory (NVFEL) in Ann Arbor, Michigan. Our laboratory has highly trained staff and all the instrumentation necessary to measure emissions from a wide range of vehicles and engines. NVFEL also provides high quality research and testing to develop emissions standards and conducts testing to ensure compliance with the standards. Our laboratory adheres to top-tier standards for test data accuracy and quality, and is considered by many organizations around the world as the gold standard for data quality in testing laboratories of this kind.

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Our compliance and oversight program for vehicles and engines is multilayered and comprehensive. We often refer to our approach as the 3x3 program. The first three refers to our testing and evaluation approach where we conduct confirmatory emissions testing at 3 points in the vehicle's

lifecycle. First, we test manufacturer prototypes to confirm that the manufacturer's tests are tracking with our own testing. Second, we test newly manufactured vehicles – to once again confirm that any changes between prototype and the final vehicle have not resulted in changes to the vehicle's emissions levels. Finally, after the vehicle has been in use and on the road for a few years, we test it again to confirm these vehicles continue to meet our standards throughout their useful life.

The next three refers to the 3 different types of tests we conduct at each of the points in a vehicle's life mentioned earlier. First, we evaluate the emissions profile of a vehicle by conducting standard dynamometer tests in our laboratory. These tests are conducted exactly as prescribed in our regulations to ensure repeatability and to ensure that we can hold manufacturers to a precise and specific standard. Second, we conduct on-road testing using portable emissions units (PEMs) to understand how the vehicle behaves in the real world. Finally, we have recently adjusted our oversight to include more unpredictable testing that we do not disclose to manufacturers. This approach allows us to better screen for irregularities (i.e., defeat devices, unreported calibrations, etc...)

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[Placeholder for EPA's long history of defeat device enforcement language – Janet providing Monday but below can work for now.]

The U.S. EPA has a long history of action to ensure fair competition. Every year millions of vehicles are recalled for emissions failures as a result of this oversight program. Over the last few years we have required Ford (on two separate occasions), General Motors, Hyundai, Kia, BMW and Mercedes to relabel their vehicles due to inflated CO2/fuel economy claims. [Note - should we include these next few sentences: We have noticed some of the press in Europe have promoted the idea that we are singling out VW for enforcement action. This idea is untrue, as is the claim that all manufacturers do this. These thoughts should be outright rejected. The idea that all manufacturers engage in deliberate attempts to commit fraud against their governments and customers is not credible. For example in the U.S., and since the Volkswagen defeat devices were revealed, we have certified BMW diesel model vehicles for the 2016 and just recently for the 2017 model years after extensive testing for potential defeat devices. Obviously, it isn't true that "all manufacturers do this" nor that we are singling out particular manufacturers. Rather the U.S. EPA carefully scrutinizes all diesel powered vehicles from every manufacturer.] We are not "anti-diesel", we are pro "clean air".

Over the 40-plus year history of our program, we have continuously updated and adapted our approaches to compliance oversight as technologies and situations changed. We take seriously our responsibility to oversee the implementation and enforcement of our clean air regulations. It is this oversight that ensures the benefits of clean air emissions standards are realized, that the industry is competing on a level playing field, and that consumers are getting what they pay for.

Again, thank you for the opportunity to offer testimony at this hearing for the Committee. I hope you will find this information helpful. I welcome your questions.